

What is claimed is:

1. A method of offering simultaneous ring services for a telephone network, comprising:
  - 5 accessing a user telephone line provided by the telephone network, the telephone line having an associated telephone number;  
Receiving a telephone call placed to the telephone number on the end user telephone line;  
retrieving target telephone numbers associated with the telephone number in  
10 response to the telephone call;  
calling the target telephone numbers so that telephones associated with the target telephone numbers ring substantially simultaneously; and  
transferring the telephone call to the telephone network after a connection is made with one target telephone number among the target telephone numbers.
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2. The method of claim 1, further comprising terminating the telephone call on the user telephone line after the connection is made with the one target telephone number.
- 20 3. The method of claim 1, wherein the transferring the telephone call further comprises transferring the telephone call to a default target telephone number if no connection is made with the target telephone numbers.
4. The method of claim 3, wherein the default telephone number is determined  
25 by the time of day the telephone call was received.
5. The method of claim 3, wherein the default telephone number is determined by the day of the week the telephone call was received.
- 30 6. The method of claim 1, wherein the transferring the telephone call to the one target telephone number further comprises transferring the telephone call to the first target telephone number which is answered among the target telephone numbers.

7. The method of claim 1, wherein the calling of the target telephone numbers further comprises initiating the call to each of the target telephone numbers at substantially the same time.
- 5 8. The method of claim 1, wherein the calling of the target numbers further comprises initiating at various times the telephone calls to compensate for different set-up times of the target telephone numbers so that the associated telephones all ring at substantially the same time.
- 10 9. The method of claim 8, wherein the coordinating at the various times further comprises selectively introducing a dynamic delay before initiating the telephone calls to the target telephone numbers.
10. The method of claim 9, wherein the dynamic delay is configurable.
- 15 11. The method of claim 1, wherein the end-user telephone line includes one of the following types of telephone lines: ISDN Primary Rate Interface; ISDN Primary Rate Interface European Standard; and ISDN Basic Rate Interface.
- 20 12. The method of claim 1, further comprising checking to determine if the phone number associated with the phone call belongs to a valid subscriber before calling the target telephone numbers.
- 25 13. The method of claim 1, further comprising forwarding caller ID information associated with the party that initiated the telephone call to the target telephone numbers.
14. The method of claim 1, wherein the telephone number and the associated target telephone numbers are maintained in a database.
- 30 15. The method of claim 1, wherein the database contains a subscriber record for maintaining account information related to a subscriber assigned to the phone number and a target record for containing the target telephone numbers.

16. The method of claim 15, wherein the account information for the subscriber further comprises at least one of the following types of information: account status; credit status; and personal information regarding the subscriber.
- 5 17. The method of claim 15, wherein the target record further comprises at least one of the following types of information: the target telephone numbers; a default telephone number; a time of day default telephone number; and a day of week default telephone number.
- 10 18. An apparatus providing simultaneous ring services for a telephone number associated with an end-user line of a phone network comprising a simultaneous ring system configured to be coupled to the end-user line of the telephone network, the simultaneous ring system configured to simultaneously ring target phone numbers associated with a telephone number and transferring the telephone call to the
- 15 telephone network if a connection to one of the target phone numbers is made in response to receiving an incoming call on the user-line.
19. The apparatus of claim 18, wherein the simultaneous ring system contains a voice card to interface with the end-user line of the telephone network.
- 20 20. The apparatus of claim 18, wherein the simultaneous ring system further comprises:
- an incoming call manager configured to receive the incoming call;
  - a call manager configured to receive the incoming call from the incoming call
- 25 manager, the call manager further configured to:
- perform a first database query to determine if the telephone number belongs to a valid subscriber; and
  - perform a second database query to retrieve the target phone numbers if there is a valid subscriber; and
- 30 an outbound call manager configured to initiate outbound telephone calls to the telephone network over the user-line and if a connection is made to one of the target telephone numbers, transferring the outbound telephone call to the one target telephone number to the telephone network.

21. The apparatus of claim 18, wherein the call manager is further configured to generate a ringing signal so the caller hears a ring after receiving the incoming call from the incoming call manager.
- 5 22. The apparatus of claim 18, wherein the outbound call manager is further configured to terminate all of the remaining outbound telephone calls once the connection to the one target telephone number is made.
- 10 23. The apparatus of claim 18, wherein the outbound call manager is further configured to transfer a predetermined outbound telephone call associated with a default target telephone number to the telephone network if no connection is made with any of the target telephone numbers.
- 15 24. The apparatus of claim 23, wherein the default telephone number is determined by the time of day the incoming telephone call was received.
25. The apparatus of claim 23, wherein the default telephone number is determined by the day of the week the incoming telephone call was received.
- 20 26. The apparatus of claim 20, wherein the calling the target telephone numbers further comprises initiating the outbound telephone calls to each of the target telephone numbers at substantially the same time.
- 25 27. The apparatus of claim 20, wherein the calling the target numbers further comprises coordinating at various times the outbound telephone calls to compensate for different set-up times of the target telephone numbers so that they all ring at substantially the same time.
- 30 28. The apparatus of claim 27, wherein the coordinating at the various times further comprises selectively introducing dynamic delays before initiating the outbound telephone calls to the target telephone numbers respectively.
29. The apparatus of claim 28, wherein the dynamic delay is configurable.

30. The apparatus of claim 18, wherein the end-user telephone line includes one of the following types of telephone lines: ISDN Primary Rate Interface; ISDN Primary Rate Interface European Standard; and ISDN Basic Rate Interface.

5 31. The apparatus of claim 18, wherein the simultaneous ring system is further configured to forward caller ID information associated with the party that initiated the incoming call to the called telephone numbers.

10 32. The apparatus of claim 18, wherein the simultaneous ring system further comprises a database configured to maintain the telephone number and the associated target telephone numbers.

15 33. The apparatus of claim 32, wherein the database contains a subscriber record for maintaining account information related to a subscriber assigned to the phone number and a second record for containing the target telephone numbers.

20 34. The apparatus of claim 33, wherein the account information for the subscriber further comprises at least one of the following types of information: account status; credit status; and personal information regarding the subscriber.

25 35. The apparatus of claim 33, wherein the second record further comprises at least one of the following types of information: the target telephone numbers; a default telephone number; a time of day default telephone number; and a day of week default telephone number.

30 36. A method of providing simultaneous ring telephone services comprising:  
maintaining a web site on a server accessible over the Internet, the web site configured to

assign a primary number to a subscriber in response to a request by the subscriber for simultaneous ring telephone services;

associate one or more target numbers as defined by the subscriber with the primary number; and

store the primary number and the target numbers so that the target numbers can be called when a call on the primary number is received.

37. The method of claim 36, wherein the web site is further configured to assign a default target number among the target numbers as defined by the subscriber.

5 38. The method of claim 37, wherein the target telephone numbers can be associated with the following types of phones: land based telephones; or wireless telephones.

39. The method of claim 36, wherein the web site is further configured to receive  
10 user information of the subscriber, the user information including the at least one of the following: the name of the subscriber; and billing information for the subscriber.

40. The method of claim 36, wherein the web server is further configured to allow  
15 the subscriber to update the target numbers.

41. The method of claim 36, wherein the web server is further configured to allow  
the subscriber to update the primary number.

42. A system configured to provide simultaneous ring telephone services  
20 comprising:

a server configured to be accessible over the Internet and to host a web site,  
the web site configured to:

assign a primary number to a subscriber in response to a request by the  
subscriber for simultaneous ring telephone services;

25 associate one or more target numbers as defined by the subscriber with the  
primary number; and

store in a memory coupled to the server the primary number and the target  
numbers so that the target numbers can be called when a call on the primary number  
is received.

30 43. The system of claim 42, wherein the web site is further configured to assign a  
default target number among the target numbers as defined by the subscriber.

44. The system of claim 43, wherein the target telephone numbers can be associated with the following types of phones: land based telephones; or wireless telephones.

5 45. The system of claim 42, wherein the web site is further configured to receive user information of the subscriber, the user information including the at least one of the following: the name of the subscriber; and billing information for the subscriber.

10 46. The system of claim 42, wherein the web server is further configured to allow the subscriber to update the target numbers.

47. The system of claim 42, wherein the web server is further configured to allow the subscriber to update the primary number.

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